# PATENT COOPERATION TREAT

## PCT

## INTERNATIONAL SEARCH REPORT

(PCT Article 18 and Rules 43 and 44)

	ant's or agent's file reference 13776.6	FOR FURTHER ACTION	see Form PCT/ISA/220 as well as, where applicable, item 5 below
	ational application No.  \[ \Gamma \text{CA2005/000420} \]	International filing date (day/month/ye 21 March 2005 (21-03-2005)	(Earliest)Priority date (day/month/year) 19 March 2004 (19-03-2004)
Applio COU	cant TURE, RAYMOND		
This in	nternational search report has been p to 18. A copy is being transmitted to	repared by this International Searching Athe International Bureau.	Authority and is transmitted to the applicant according to
This in	nternational search report consists of	a total of 6 sheets.	
	[X] It is also accompanied by a co	py of each prior art document cited in the	nis report.
1.	Basis of the report		The state of the s
a,	With regard to the language, the in	ternational search was carried out on the	basis of:
	[X] the international app	lication in the language in which it was	filed
		sternational application into shed for the purposes of international sea	, which is the language arch (Rules 12.3(a) and 23.1(b))
b.	[ ] With regard to any nucleotide	and/or amino acid sequence disclosed	in the international application, see Box No. I
2.	[ ] Certain claims were found u	nsearchable (see Box No. II)	
3.	[X] Unity of invention is lacking	(see Box No. III)	
4.	With regard to the title,		•
	[X] the text is approved as submit	ted by the applicant	
	[ ] the text has been established \	by this Authority to read as follows:	
5.	With regard to the abstract,		
	[X] the text is approved as submi		a transfer and the Power William William
			ority as it appears in Box No. IV. The applicant search report, submit comments to this Authority
6.	With regard to the drawings,		
	a. the figure of the drawings to	be published with the abstract is Figure	No. <u>1</u>
	[X] as suggested by the	applicant	
	[ ] as selected by this A	authority, because the applicant failed to	suggest a figure
	[ ] as selected by this A	authority, because this figure better char	acterizes the invention
	b. [ ] none of the figures	is to be published with the abstract	

Box No. II	Observations where certain claims were found unsearchable (Continuation of item 2 of the first sheet)
This international reasons:	onal search report has not been established in respect of certain claims under Article 17(2)(a) for the following
	im Nos.:
2. [ ] Cla bec that	im Nos. :  ause they relate to parts of the international application that do not comply with the prescribed requirements to such an extent an omeaningful international search can be carried out, specifically:
	im Nos.: ause they are dependant claims and are not drafted in accordance with the second and third sentences of Rule 6.4(a).
Box No. III	Observations where unity of invention is lacking (Continuation of item 3 of first sheet)
	onal Searching Authority found multiple inventions in this international application, as follows:
	all required additional search fees were timely paid by the applicant, this international search report covers all
2. [ ] As	all searchable claims could be searched without effort justifying additional fees, this Authority did not invite ment of additional fees.
	only some of the required additional search fees were timely paid by the applicant, this international search report vers only those claims for which fees were paid, specifically claim Nos. :
i	required additional search fees were timely paid by the applicant. Consequently, this international search report is stricted to the invention first mentioned in the claims; it is covered by claim Nos.:
	1-30, 64, 63
	Remark on Protest [ ] The additional search fees were accompanied by the applicant's protest and, where applicable, the payment of a protest fee.
	[ ] The additional search fees were accompanied by the applicant's protest but the applicable protest fee was not paid within the time limit specified in the invitation.
	[ ] No protest accompanied the payment of additional search fees.

## INTERNAT , AL SEARCH REPORT

International application No. PCT/CA2005/000420

# A. CLASSIFICATION OF SUBJECT MATTER IPC(7): E04F 11/025.

According to International Patent Classification (IPC) or to both national classification and IPC

#### **B. FIELDS SEARCHED**

Minimum documentation searched (classification system followed by classification symbols)

IPC(7): E04F 11/025, 035, 09, 104, 108, 16 USPC: 52/182, 183, 188

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

Electronic database(s) consulted during the international search (name of database(s) and, where practicable, search terms used)

Canadian Patent Database, Delphion, Espacenet (stair\*, stringer, modular, laminate)

#### C. DOCUMENTS CONSIDERED TO BE RELEVANT

Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
CA 1,145,526 A1 (LAPOINTE) 03 May 1983 (03-05-1983) *page 2, line 6 to page 6, line 3* *figures 1-3*	1-11, 13-19, 23-32, 36-42, 84, 85 12, 20-22, 33-35, 43-58
US 2,593,683 (LYONS) 22 April 1952 (22-04-1952) *column 1, lines 1-13* *column 1, line 43 to column 4, line 33* *figures 1-2*	1, 3-8, 17, 19, 24, 84 12, 20-22
CA 1,300,337 (MOLINAZZI) 12 May 1992 (12-05-1992) *page 2, line 25 to page 3a, line 34* *figure 5*	1-8, 13-15, 17 12
US 2,724,466 (PHILLIPS) 22 November 1955 (22-11-1955) *column 2, lines 13-32*	12
CA 2,366,561 A1 (GRENIER) 16 August 2001 (16-08-2001) *page 2, line 9 to page 6, line 11*	20-22, 43-58
	*page 2, line 6 to page 6, line 3* *figures 1-3*  US 2,593,683 (LYONS) 22 April 1952 (22-04-1952) *column 1, lines 1-13* *column 1, line 43 to column 4, line 33* *figures 1-2*  CA 1,300,337 (MOLINAZZI) 12 May 1992 (12-05-1992) *page 2, line 25 to page 3a, line 34* *figure 5*  US 2,724,466 (PHILLIPS) 22 November 1955 (22-11-1955) *column 2, lines 13-32*  CA 2,366,561 A1 (GRENIER) 16 August 2001 (16-08-2001)

[X]	Further documents are listed in the continuation of Box C.	[X] See patent family annex.	
*	Special categories of cited documents:	"T" later document published after the international filing date or priority	
"A"	document defining the general state of the art which is not considered to be of particular relevance	"T" later document published after the international filing date or priority date and not in conflict with the application but cited to understand the principle or theory underlying the invention	
"E"	earlier application or patent but published on or after the international filing date	"X" document of particular relevance; the claimed invention cannot be considered novel or cannot be considered to involve an inventive step when the document is taken alone	
"L"	document which may throw doubts on priority claim(s) or which is cited to establish the publication date of another citation or other special reason (as specified)	"Y"  document of particular relevance; the claimed invention cannot be considered to involve an inventive step when the document is combined with one or more other such documents, such combination	
"O"	document referring to an oral disclosure, use, exhibition or other means	being obvious to a person skilled in the art	
"P"	document published prior to the international filing date but later than the priority date claimed	"&" document member of the same patent family	
Date	of the actual completion of the international search	Date of mailing of the international search report	
09 Ju	me 2005 (09-06-2005)	20 July 2005 (20-07-2005)	
	e and mailing address of the ISA/CA dian Intellectual Property Office	Authorized officer	
Place 50 V Gatin	e du Portage I, C114 - 1st Floor, Box PCT ictoria Street neau, Quebec K1A 0C9	Patrick Cyr (819) 953-1304	
racs	imile No.: 001(819)953-2476		

## INTERNA' AL SEARCH REPORT

едоту*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
Y	CA 2,226,065 A1 (ZENKNER) 25 December 1998 (25-12-1998) *page 2, line 19 to page 5, line 10*	33-35
A	FR 2,740,802 A1 (FREDERIC) 09 May 1997 (09-05-1997) *whole document*	1-58, 84, 85

## INTERNA. NAL SEARCH REPORT Information on patent family members

Patent Document Cited in Search Report	Publication Date	Patent Family Member(s)	Publication Date
CA1145526 A1	03-05-1983	DE3263810D D1 EP0060014 A1 US4422270 A ZA8200403 A	04-07-1985 15-09-1982 27-12-1983 29-12-1982
US2593683	22-04-1952	NONE	
CA1300337	12-05-1992	AT68547T T DE3773828D D1 EP0263916 A2 ES2026862T T3 GR3003391T T3 IT1201580 B JP63110353 A US4798030 A	15-11-1991 21-11-1991 20-04-1988 16-05-1992 17-02-1993 02-02-1989 14-05-1988 17-01-1989
US2724466	22-11-1955	NONE	
CA2366561 A1	16-08-2001	AU3146301 A US6397529 B1 WO0159233 A1	20-08-2001 04-06-2002 16-08-2001
CA2226065 A1	25-12-1998	BR9800064 A DE19727043 A1 DE19881103D D2 US6067758 A WO9900560 A1	20-03-2001 04-02-1999 04-01-2001 30-05-2000 07-01-1999
FR2740802 A1	09-05-1997	NONE	

International application No. PCT/CA2005/000420

Supplemental Box No. III

Group A - Claims 1-58, 84 and 85 are directed to a modular stringer comprising step support units having a main structural body, a first mating structure and a second mating structure, said first mating structure of said step support unit being adapted to be matingly coupled with an adjacent second mating structure of an adjacent step support unit such that said adjacent unit is vertically offset therefrom;

Group B - Claims 59-76 and 86 are directed to a modular stringer comprising step support units having at least one shaft and at least one coupling arm, said coupling arm of a first step support unit being adapted for accepting and solidly retaining said shaft of an adjacent step support unit therein such that said adjacent support unit may be vertically offset therefrom; and

Group C - Claims 77-83 and 87-90 are directed to a staircase comprising: at least two stringers; a series of steps adapted to be mounted to said stringers; and a plurality of step mounting brackets having a first flange and a second flange, each said step comprising a tread and a riser which are mounted to said stringers by said step mounting brackets.

Bo	x N	o.	II Observations where certain claims were found unsearchable (Continuation of item 2 of the first sheet)
Thi rea			mational search report has not been established in respect of certain claims under Article 17(2)(a) for the following
1.	[	]	Claim Nos.: because they relate to subject matter not required to be searched by this Authority, namely:
2.	[	]	Claim Nos.: because they relate to parts of the international application that do not comply with the prescribed requirements to such an extent that no meaningful international search can be carried out, specifically:
3.	C	]	Claim Nos.: because they are dependant claims and are not drafted in accordance with the second and third sentences of Rule 6.4(a).
Box	N	0.	Observations where unity of invention is lacking (Continuation of item 3 of first sheet)
Thi	s In	ter	national Searching Authority found multiple inventions in this international application, as follows:
[sec	: Su	рр	lemental Box No. III]  .
1.	[	1	As all required additional search fees were timely paid by the applicant, this international search report covers all searchable claims.
2.	[	]	As all searchable claims could be searched without effort justifying additional fees, this Authority did n ot invite payment of additional fees.
3.	[	]	As only some of the required additional search fees were timely paid by the applicant, this international search report covers only those claims for which fees were paid, specifically claim Nos.:
4.	[2	x]	No required additional search fees were timely paid by the applicant. Consequently, this international search report is
			restricted to the invention first mentioned in the claims; it is covered by claim Nos. : 1-58, 84, 85
			Remark on Protest [ ] The additional search fees were accompanied by the applicant's protest a.nd, where applicable, the payment of a protest fee.
			[ ] The additional search fees were accompanied by the applicant's protest but the applicable protest fee was not paid within the time limit specified in the invitation.
			No protest accompanied the payment of additional search fees.

International application No. PCT/CA2005/000420

A. CLASSIFICATION OF SUBJECT MATTER IPC(7): E04F 11/025

According to International Patent Classification (IPC) or to both national classification and IPC

#### B. FIELDS SEARCHED

Minimum documentation searched (classification system followed by classification symbols)

IPC(7): E04F 11/025, 035, 09, 104, 108, 16 USPC: 52/182, 183, 188

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

Electronic database(s) consulted during the international search (name of database(s) and, where practicable, search terms used)

Canadian Patent Database, Delphion, Espacenet (stair\*, stringer, modular, laminate)

#### C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X Y	CA 1,145,526 A1 (LAPOINTE) 03 May 1983 (03-05-1983) *page 2, line 6 to page 6, line 3* *figures 1-3*	1-11, 13-19, 23-32, 36-42, 84, 85 12, 20-22, 33-35, 43-58
X Y	US 2,593,683 (LYONS) 22 April 1952 (22-04-1952) *column 1, lines 1-13* *column 1, line 43 to column 4, line 33* *figures 1-2*	1, 3-8, 17, 19, 24, 84 12, 20-22
X Y	CA 1,300,337 (MOLINAZZI) 12 May 1992 (12-05-1992) *page 2, line 25 to page 3a, line 34* *figure 5*	1-8, 13-15, 17 12
Y	US 2,724,466 (PHILLIPS) 22 November 1955 (22-11-1955) *column 2, lines 13-32*	12
Y	CA 2,366,561 A1 (GRENIER) 16 August 2001 (16-08-2001) *page 2, line 9 to page 6, line 11*	20-22, 43-58

[X] I	Further documents are listed in the continuation of Box C.	[X]	See patent family annex.
•	Special categories of cited documents :	"T"	later document published after the international filing date or priority
"A"	document defining the general state of the art which is not considered to be of particular relevance		date and not in conflict with the application but cited to understand the principle or theory underlying the invention
"E"	earlier application or patent but published on or after the international filing date	"X"	document of particular relevance; the claimed invention cannot be considered novel or cannot be considered to involve an inventive step when the document is taken alone
"L"	document which may throw doubts on priority claim(s) or which is cited to establish the publication date of another citation or other special reason (as specified)	"Y"	document of particular relevance; the claimed invention cannot be considered to involve an inventive step when the document is combined with one or more other such documents, such combination
"O"	document referring to an oral disclosure, use, exhibition or other means	*&*	being obvious to a person skilled in the art document member of the same patent family
"P"	document published prior to the international filing date but later than the priority date claimed		Cocument member of the same patent family
Date	of the actual completion of the international search	Date	of mailing of the international search report
09 Ju	ne 2005 (09-06-2005)	20 Ju	ly 2005 (20-07-2005)
Name	and mailing address of the ISA/CA	Autho	orized officer
	dian Intellectual Property Office		
	du Portage I, C114 - 1st Floor, Box PCT	Patri	ck Cyr (819) 953-1304
	ctoria Street	į	
	eau, Quebec K1A 0C9	- 1	
racsi	mile No.: 001(819)953-2476		

egory*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
Y	CA 2,226,065 A1 (ZENKNER) 25 December 1998 (25-12-1998) *page 2, line 19 to page 5, line 10*	33-35
A	FR 2,740,802 A1 (FREDERIC) 09 May 1997 (09-05-1997) *whole document*	1-58, 84, 85

Information on patent family members

				3.
				••
Patent Document Cited in Search Report	Publication Date	Patent Family Member(s)	Publication Date	•
CA1145526 A1	03-05-1983	DE3263810D D1 EP0060014 A1 US4422270 A ZA8200403 A	04-07-1985 15-09-1982 27-12-1983 29-12-1982	
US2593683	22-04-1952	NONE	····	
CA1300337	12-05-1992	AT68547T T DE3773828D D1 EP0263916 A2 ES2026862T T3 GR3003391T T3 IT1201580 B JP63110353 A US4798030 A	15-11-1991 21-11-1991 20-04-1988 16-05-1992 17-02-1993 02-02-1989 14-05-1988 17-01-1989	
US2724466	22-11-1955	NONE	<u> </u>	
CA2366561 A1	16-08-2001	AU3146301 A US6397529 B1 WO0159233 A1	20-08-2001 04-06-2002 16-08-2001	,
CA2226065 A1	25-12-1998	BR9800064 A DE19727043 A1 DE19881103D D2 US6067758 A WO9900560 A1	20-03-2001 04-02-1999 04-01-2001 30-05-2000 07-01-1999	
FR2740802 A1	09-05-1997	NONE		

International application No. PCT/CA2005/000420

Supplemental Box No. III Group A - Claims 1-58, 84 and 85 are directed to a modular stringer comprising step support units having a main structural body, a first mating structure and a second mating structure, said first mating structure of said step support unit being adapted to be matingly coupled with an adjacent second mating structure of an adjacent step support unit such that said adjacent unit is vertically offset therefrom; Group B - Claims 59-76 and 86 are directed to a modular stringer comprising step support units having at least one shaft and at least one coupling arm, said coupling arm of a first step support unit being adapted for accepting and solidly retaining said shaft of an adjacent step support unit therein such that said adjacent support unit may be vertically offset therefrom; and Group C - Claims 77-83 and 87-90 are directed to a staircase comprising: at least two stringers; a series of steps adapted to be mounted to said stringers; and a plurality of step mounting brackets having a first flange and a second flange, each said step comprising a tread and a riser which are mounted to said stringers by said step mounting brackets.